

What is claimed is:

1. An equipment for a high mounted lamp having ascending and descending functions, comprising:

5 a main body installed to a certain height and having a drum for winding a wire rope and a motor for rotating the drum;

a casing mounted under the main body and having an open bottom;

10 an upper terminal unit installed in the casing to be spaced apart from the main body and having at least one upper contact terminal at a lower end;

a moving body connected to the wire rope to be vertically movable by the motor, the moving body having a connecting unit to install a lamp thereto and a lower contact terminal mounted to an upper end
15 thereof corresponding to the upper contact terminal; and

a stopper installed to the casing for fixing the moving body in the state that the upper and lower contact terminals are contacted each other,

wherein at least one of the upper and lower contact terminals has
20 a ring shape.

2. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

wherein the upper contact terminals formed at the upper terminal unit include circular ring-shaped inner and outer contact terminals, and

wherein the lower contact terminals formed at the moving body
5 include circular ring-shaped inner and outer contact terminals corresponding to the upper contact terminals.

3. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

10 wherein the upper contact terminals formed at the upper terminal unit include circular ring-shaped inner and outer contact terminals, and

wherein the lower contact terminals formed at the moving body include four contact points positioned at a same radius as the inner
15 and outer contact terminals.

4. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

wherein the lower contact terminals formed at the moving body
20 include circular ring-shaped inner and outer contact terminals, and

wherein the upper contact terminals formed at the upper terminal unit include four contact points positioned at a same radius as the inner and outer contact terminals.

5. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

wherein the upper contact terminals formed at the upper terminal
5 unit include circular ring-shaped inner and outer contact terminals,
and

wherein the lower contact terminals formed at the moving body
include two contact points positioned at a same radius as the inner and
outer contact terminals.

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6. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

wherein the lower contact terminals formed at the moving body
include circular ring-shaped inner and outer contact terminals, and

15 wherein the upper contact terminals formed at the upper terminal
unit include two contact points positioned at a same radius as the inner
and outer contact terminals.

7. The equipment for a high mounted lamp having ascending
20 and descending functions as claimed in claim 1,

wherein a spring is installed to at least one of the upper contact
terminals mounted to the upper terminal unit so as to press the
corresponding upper contact terminal toward the moving body.

8. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 1,

wherein the upper and lower contact terminals are respectively
5 formed so that a center portion is bent upward.

9. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 8,

wherein both of the upper and lower contact terminals have ring
10 shape.

10. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 9,

wherein a plurality of elastic flaps are formed in inner and outer
15 circumferences of the ring-shaped upper contact terminal so that the elastic flaps are afloat downward rather than both ends of the upper contact terminal.

11. The equipment for a high mounted lamp having ascending
20 and descending functions as claimed in claim 9,

wherein a plurality of elastic flaps are formed in inner and outer circumferences of the ring-shaped lower contact terminal so that the elastic flaps are afloat upward rather than both ends of the lower

contact terminal.

12. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 9,

5 wherein a plurality of elastic flaps are formed in inner and outer circumferences of the ring-shaped upper contact terminal so that the elastic flaps are afloat downward rather than both ends of the upper contact terminal, and

wherein a plurality of elastic flaps are formed in inner and outer
10 circumferences of the ring-shaped lower contact terminal so that the elastic flaps are afloat upward rather than both ends of the lower contact terminal.

13. The equipment for a high mounted lamp having ascending
15 and descending functions as claimed in claim 1,

wherein the stopper is rotatably mounted to the casing to elastically maintain a horizontal state by a spring, and

wherein a protrusion is formed at a side of the moving body at a position partially contacted with the stopper so that the protrusion is
20 hooked on the stopper when descending after ascending above the stopper in order to fix the height of the moving body, while the protrusion is unhooked from the stopper when moving above the stopper in order to make the moving body be movable downward.

14. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 13,

wherein a contact mark is mounted to a predetermined position of
5 the wire rope and a first limit switch is installed to the main body to come in contact with the contact mark when the moving body reaches the upper terminal unit so as to drive the moving body slowly by repeatedly connecting/disconnecting power of the motor at a short interval after the first limit switch detects the contact mark during the
10 ascent of the moving body.

15. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 14,

wherein an additional contact mark of a predetermined length is
15 mounted to an upper end of the wire rope so that the first limit switch comes in contact with the additional contact mark from the time that the moving body approaches near the ground during the descent of the moving body and makes the moving body descend slowly and then stop by repeatedly connecting/disconnecting power of the motor.

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16. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 13,

wherein a guide rod is mounted between the main body and the

casing to pass through the upper terminal unit so that the upper terminal unit vertically moves along the guide rod, and

wherein a spring is installed to the guide rod between the upper terminal unit and the main body so as to press the upper terminal unit
5 downward.

17. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 15,

wherein a second limit switch is installed to the casing for
10 detecting that the upper terminal unit ascends to a predetermined height in order to determine a point of time that the protrusion of the moving body deviates from the stopper, and

wherein the motor is stopped in receipt of a detect signal of the second limit switch.

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18. The equipment for a high mounted lamp having ascending and descending functions as claimed in claim 17,

wherein the motor, which is stopped by the detect signal of the second limit switch, is temporarily driven inversely as soon as the
20 protrusion deviates from the stopper in order to slightly move the moving body downward.

19. The equipment for a high mounted lamp having ascending

and descending functions as claimed in claim 13,

wherein a third limit switch is installed under the main body to come in contact with the upper terminal unit whether the upper terminal unit ascends so that the stopper completely deviates from the
5 side of the moving body, and

wherein the motor is driven inversely in receipt of a detect signal of the third limit switch to descend the moving body.